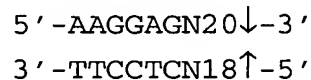


ABSTRACT

In accordance with the present invention, there is provided a novel type II restriction endonuclease,
5 obtainable from *Corynebacterium striatum* M82B,
hereinafter referred to as "CstMI", which endonuclease:

- (1) recognizes the nucleotide sequence 5'-AAGGAG-
3' in a double-stranded DNA molecule as shown
10 below,



15 (wherein G represents guanine, C represents cytosine, A represents adenine, T represents thymine and N represents either G, C, A, or T);

- 20 (2) cleaves said sequence at the phosphodiester bonds between the 20th and the 21th nucleotides 3' to the recognition sequence in the 5'-AAGGAG-3 strand of the DNA, and between the 18th and 19th nucleotides 5' to the recognition sequence in the complement stand, 5'-
25 CTCCTT-3', to produce a 2 base 3' extension; and

- (3) possesses a second enzymatic activity that recognizes the same DNA sequence, 5'-AAGGAG-3', but
30 modifies this sequence by the addition of a methyl group to prevent cleavage by the CstMI endonuclease activity.